

We claim:

1. A method for clamping a reticle within a lithography system, comprising:
clamping a first area of the reticle to a chuck of the lithography system at a first
time point; and

5 clamping a second area of the reticle to the chuck at a second time point after the
first time point such that the reticle is flattened against the chuck.

2. The method of claim 1, wherein the first area is toward a center of the reticle,
and wherein the second area is toward an outer perimeter of the reticle.

10 3. The method of claim 1, wherein the reticle has a square shape, and wherein the
first area is disposed at a center of the reticle, and wherein the second area is a frame
disposed toward an outer perimeter of the reticle.

15 4. The method of claim 1, wherein the first area is at a center of the reticle that has
a square shape, and wherein the method further comprises:
clamping each of a plurality of frames of the reticle to the chuck successively in
time from the center toward an outer perimeter of the reticle.

20 5. The method of claim 1, wherein the chuck is an electrostatic chuck having a
first pair of electrodes and a second pair of electrodes, and wherein the method further
comprises:

25 applying a voltage difference across the first pair of electrodes facing a first
coating at the first area of the reticle at the first time point for clamping the first area to
the chuck; and

applying a voltage difference across the second pair of electrodes facing a second
coating at the second area of the reticle at the second time point for clamping the second
area to the chuck.

30 6. The method of claim 1, wherein the lithography system uses extreme ultraviolet
light having a wavelength in a range of from about 110Å to about 150Å.

7. The method of claim 1, wherein light reflected from the reticle is used for patterning material on a semiconductor wafer within the lithography system.

8. A system for clamping a reticle within a lithography system, comprising:

5 means for clamping a first area of the reticle to a chuck of the lithography system at a first time point; and

means for clamping a second area of the reticle to the chuck at a second time point after the first time point such that the reticle is flattened against the chuck.

10 9. The system of claim 8, wherein the first area is toward a center of the reticle, and wherein the second area is toward an outer perimeter of the reticle.

10. The system of claim 8, wherein the reticle has a square shape, and wherein the first area is disposed at a center of the reticle, and wherein the second area is a frame
15 disposed toward an outer perimeter of the reticle.

11. The system of claim 8, wherein the first area is at a center of the reticle that has a square shape, the system further comprising:

20 means for clamping each of a plurality of frames of the reticle to the chuck successively in time from the center toward an outer perimeter of the reticle.

12. The system of claim 8, wherein the chuck is an electrostatic chuck having a first pair of electrodes and a second pair of electrodes, the system further comprising:

25 means for applying a voltage difference across the first pair of electrodes facing a first coating at the first area of the reticle at the first time point for clamping the first area to the chuck; and

means for applying a voltage difference across the second pair of electrodes facing a second coating at the second area of the reticle at the second time point for clamping the second area to the chuck.

30 13. The system of claim 8, wherein the lithography system uses extreme

ultraviolet light having a wavelength in a range of from about 110Å to about 150Å.

14. The system of claim 8, wherein light reflected from the reticle is used for patterning material on a semiconductor wafer within the lithography system.

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15. A lithography system comprising:
an electrostatic chuck having a first pair of electrodes and a second pair of electrodes;

a reticle having a first coating and a second coating facing the chuck;

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a voltage source; and

a data processor that controls the voltage source to apply a voltage difference across the first pair of electrodes facing the first coating at a first area of the reticle at a first time point for clamping the first area to the chuck, and that controls the voltage source to apply a voltage difference across the second pair of electrodes facing the second coating at a second area of the reticle at a second time point for clamping the second area to the chuck, such that the reticle is flattened against the chuck.

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16. The lithography system of claim 15, wherein the first area is toward a center of the reticle, and wherein the second area is toward an outer perimeter of the reticle.

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17. The lithography system of claim 15, wherein the reticle has a square shape, and wherein the first area is disposed at a center of the reticle, and wherein the second area is a frame disposed toward an outer perimeter of the reticle.

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18. The lithography system of claim 15, wherein the lithography system uses extreme ultraviolet light having a wavelength in a range of from about 110Å to about 150Å.

19. The lithography system of claim 15, wherein light reflected from the reticle is used for patterning material on a semiconductor wafer within the lithography system.

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